

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

Please amend the claims as follows:

1. (Currently amended) A method for managing memory, the method comprising:

receiving an application state from each of a plurality of applications in memory, wherein each said application includes a plurality of operational stages, and wherein each application state indicates a presence of differences between a first operational stage of a corresponding activated application at a point when memory is evaluated for application removal and a second operational stage of the corresponding application upon being unloaded from the memory and reactivated, wherein said receiving the application state from each of the plurality of applications in memory includes:

receiving an information object along with the application state, the information object being associated with at least one of the following: results of application unloading, presentation options in conjunction with the application unloading, and at least one of: graphics, text, and sound to be provided along with the presentation options;

receiving a first stateful state with a state record indicating an absence of said differences between said first operational stage and said second operational stage, and

no significant ones of user perceivable differences between said activated and reactivated application; and

determining which of the plurality of applications to effect removal from the memory based on the received application states and associated pre-determined application priorities, wherein if more than one application has an identical state and an identical priority further determining which of the plurality of applications to effect removal from the memory based on inactivity time for the respective applications as indicated by a flag setting, wherein an application with a corresponding application state indicating the absence of said differences between said first operational stage and said second operational stage is to be removed from the memory before other applications with application states indicating the presence of said differences between said first operational stage and said second operational stage.

2. (Previously Presented) The method of claim 1, wherein said receiving the application state from each of the plurality of applications in memory further includes receiving one of:

a stateless state indicating the absence of said differences between said first operational stage and said second operational stage and no significant ones of user perceivable differences between said activated and reactivated application, and

a second stateful state with no state record indicating the presence of said differences between said first operational stage and said second operational

stage and the presence of said user perceivable differences between said activated and reactivated application.

3. (Previously Presented) The method of claim 2, wherein said receiving the stateless state includes receiving an indication that a user would perceive no significant difference between a presentation associated with one of the plurality of applications before and after being unloaded from the memory and reactivated.

4. (Previously Presented) The method of claim 1, wherein said receiving the first stateful state with the state record includes receiving an indication that a user would perceive no significant difference between a presentation associated with one of the plurality of applications before and after being unloaded from the memory and reactivated because the state is saved in the state record.

5. (Previously Presented) The method of claim 4, further including effecting the removal of the application with the first stateful state with the state record and saving the state record.

6. (Original) The method of claim 5, further including, responsive to a user activating the removed application, restoring the removed application with the saved state record.

7. (Previously Presented) The method of claim 2, wherein said receiving the second stateful state with no state record includes receiving an indication that a user would perceive a difference between a presentation associated with one of the plurality of applications before and after being unloaded from the memory and reactivated.

8. (Previously Presented) The method of claim 7, wherein said receiving the second stateful state with no state record includes receiving unload information, wherein the unload information includes at least one of an unload information explanation and unload information choices.

9. (Previously Presented) The method of claim 2, wherein said determining which of the plurality of applications to effect removal includes determining that an application with the stateless state is removed before an application with the first stateful state with the state record, and that an application with the first stateful state with the state record is removed before an application with the second stateful state with no state record.

10. (Previously Presented) The method of claim 2, further including effecting the removal of an application with the stateless state before the removal of an application with the first stateful state with the state record, and effecting the removal of an application with the first stateful state with the state record before the removal of an application with the second stateful state with no state record.

11. (Previously Presented) The method of claim 2, further including providing an explanation to a user when an application to be removed from the memory includes the second stateful state with no state record, wherein the explanation informs the user the result of removing the application.

12. (Currently Amended) A method for managing memory, the method comprising:

receiving an indication that memory space is needed in memory;

receiving an application state from each of a plurality of applications in memory, wherein each said application includes a plurality of operational stages, and wherein each application state indicates a presence of differences between an activated operational stage of a corresponding activated application at a point when memory is evaluated for application removal and a reactivated operational stage of the corresponding application upon being unloaded from the memory and reactivated and, wherein said receiving an application state includes receiving:

an information object along with the application state, the information object being associated with at least one of the following: results of application unloading, presentation options in conjunction with the application unloading, and at least one of: graphics, text, and sound to be provided along with the presentation options;

a stateless state indicating an absence of said differences between said activated and reactivated operational stages and no significant ones of user perceivable differences between said activated and reactivated application,

a first stateful state with a state record indicating the absence of said differences between said activated and reactivated operational stages and no significant ones of said user perceivable differences between said activated and reactivated application, and

a second stateful state with no state record indicating the presence of said differences between said activated and reactivated operational stages and the presence of said user perceivable differences between said activated and reactivated application;

determining which of the plurality of applications to effect removal from the memory based on the received application state for each of the plurality of applications in memory and associated pre-determined application priorities, wherein if more than one application has an identical state and an identical priority further determining which of the plurality of applications to effect removal from the memory based on inactivity time for the respective applications as indicated by a flag setting, wherein said determining includes determining that an application with the stateless state is to be removed before an application with the first stateful state with the state record, and that an application with the first stateful state with the state record is to be removed before an application with the second stateful state with no state record; and
effecting the removal of determined ones the plurality of applications.

13. – 17. (Canceled)

18. (Currently Amended) A system for managing memory, said system comprising:

a memory with logic; and

a processor configured with the logic to:

receive an application state from each of a plurality of applications in memory, wherein each said application includes a plurality of operational stages, and wherein each application state indicates a presence of differences between first operational stage of a corresponding activated application at a point when memory is evaluated for application removal and a second operational stage of the corresponding application upon being unloaded from the memory and reactivated, wherein the application state further includes a first stateful state with a state record indicating an absence of said differences between said first operational stage and said second operational stage and no significant ones of user perceivable differences between said activated and reactivated application;

receive an information object along with the application state, the information object being associated with at least one of the following: results of application unloading, presentation options in conjunction with the application unloading, and at least one of: graphics, text, and sound to be provided along with the presentation options; and

determine which of the plurality of applications to effect removal from the memory based on the received application states and associated pre-determined application priorities, wherein if more than one application has an identical state and an identical priority further determining which of the plurality of applications

to effect removal from the memory based on inactivity time for the respective applications as indicated by a flag setting, wherein an application with an application state indicating the absence of said differences between said first operational stage and said second operational stage is to be removed from the memory before other applications with application states indicating the presence of said differences between said first operational stage and said second operational stage.

19. (Previously Presented) The system of claim 18, wherein said application state further includes one of:

a stateless state indicating the absence of said differences between said first operational stage and said second operational stage and no significant ones of user perceivable differences between said activated and reactivated application, and

a second stateful state with no state record indicating the presence of said differences between said first operational stage and said second operational stage and the presence of said user perceivable differences between said activated and reactivated application.

20. (Previously Presented) The system of claim 19, wherein the stateless state indicates that a user would perceive no significant difference between a presentation associated with one of the plurality of applications before removal from the memory and after reactivation.

21. (Previously Presented) The system of claim 18, wherein the first stateful state with the state record indicates that a user would perceive no significant difference between a presentation associated with one of the plurality of applications before removal from the memory and after reactivation because the state is saved in the state record.

22. (Previously Presented) The system of claim 21, wherein the processor is further configured with the logic to effect the removal of the application with the first stateful state with the state record and save the state record.

23. (Original) The system of claim 22, wherein the processor is further configured with the logic to, responsive to a user activating the removed application, restore the removed application with the saved state record.

24. (Previously Presented) The system of claim 19, wherein the second stateful state with no state record indicates that a user would perceive a difference between a presentation associated with one of the plurality of applications before removal from the memory and after reactivation.

25. (Original) The system of claim 24, wherein the processor is further configured with the logic to provide unload information, wherein the unload information

includes at least one of an unload information explanation and unload information choices.

26. (Previously Presented) The system of claim 19, wherein the processor is further configured with the logic to determine that an application with the stateless state is removed before an application with the first stateful state with the state record, and that an application with the first stateful state with the state record is removed before an application with the second stateful state with no state record.

27. (Previously Presented) The system of claim 18, wherein the processor is further configured with the logic to effect the removal of an application with a stateless state before the removal of an application with the first stateful state with the state record, wherein the processor is further configured with the logic to effect the removal of an application with the first stateful state with the state record before the removal of an application with a second stateful state with no state record.

28. (Previously Presented) The system of claim 18, wherein the processor is further configured with the logic to provide an explanation to a user when an application to be removed from the memory includes a second stateful state with no state record, wherein the explanation informs the user the result of removing the application.